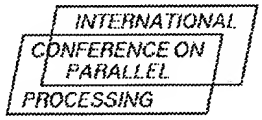
2000 INTERNATIONAL CONFERENCE ON PARALLEL PROCESSING

The Westin Harbour Castle
Toronto, Canada

August 21-24 (Monday-Thursday), 2000



Organizing Committees

- **Advance Programs:**
  - **ICPP-2000 (html, pdf, postscript)**
  - **Workshops in conjuction with ICPP-2000:**
    - **Workshop on High Performance Scientific and Engineering Computing with Applications**
    - **Workshop on Metacomputing Systems and Applications**
    - **Workshop on Network-Based Computing**
    - **Workshop on Parallel and Distributed Multimedia Systems**
    - **Workshop on Pervasive Computing**
    - **Workshop on Scalable Web Services**
    - **Workshop on Wireless Networks and Mobile Computing**
- **Advance Announcement (postscript)**
- **Conference/Workshops Registrations**
- **Hotel and Travel Information**
- **Overhead and LCD Data Projectors**

2000 International Conference on Parallel Processing

The Westin Harbour Castle • Toronto, Canada • August 21-24

	Pier 4 room	Pier 5 room	Pier 7/8 room	Pier 9 room
Monday, August 21				
8:00	Workshop registration and continental breakfast (Pier 5 foyer)			
8:30	Workshop on MSA, 1-4	Workshop on PC, 1-4	Workshop on SWS, 1-4	Workshop on HPSECA, 1-4
Tuesday, August 22				
8:00	Registration and continental breakfast (Pier 5 foyer)			
9:00	Opening and Awards (Pier 4/5 room)			
9:30	**Keynote address:** Dr. Shoichi Noguchi, President, University of Aizu, Japan (Pier 4/5 room)			
10:30	Break (Pier 5 foyer)			
11:00	Session 1A: Application-specific	Session 1B: Interconnection networks	Session 1C: Message-passing	Workshop on HPSECA, 5
12:00	Lunch (on your own)			
1:30	Session 2A: Reuse and speculation	Session 2B: Shared-memory systems	Session 2C: Multimedia servers	Workshop on HPSECA, 6
3:00	Break (Pier 5 foyer)			
3:30	Session 3A: Adaptive systems	Session 3B: Wireless networks, I	Session 3C: Predicting parallelism	Workshop on HPSECA, 7
5:00	Recess			
7:00	Wine and cheese reception (Regatta room)			
Wednesday, August 23				
8:00	Registration and continental breakfast (Pier 5 foyer)			
9:00	**Keynote address:** Dr. Tilak Agerwala, Vice President, IBM Enterprise Systems Group (Pier 4/5 room)			
10:00	Break (Pier 5 foyer)			
10:30	Session 4A: Web servers	Session 4B: Wireless networks, II	Session 4C: Heterogeneous computing, I	Workshop on NBC, 1
12:00	Lunch (on your own)			
1:30	Session 5A: High-performance I/O	Session 5B: Network routing	Session 5C: Heterogeneous computing, II	Workshop on NBC, 2
3:00	Break (Pier 5 foyer)			
3:30	**Panel:** Scalable computing infrastructure for scientific and commercial applications (Pier 4/5 room)			
5:00	Recess			
7:00	Banquet dinner (Regatta room)			
Thursday, August 24				
8:00	Registration and continental breakfast (Pier 5 foyer)			
9:00	**Keynote address:** Dr. Zvonko Vranesic, Professor, University of Toronto (Pier 4/5 room)			
10:00	Break (Pier 5 foyer)			
10:30	Session 6A: Network computing	Session 6B: Reconfigurable networks	Session 6C: Clustering/partitioning	Workshop on WNMC, 1
12:00	Lunch (on your own)			
1:30	Session 7A: Large-scale/NUMA	Session 7B: Optical networks	Workshop on PDMS, 1	Workshop on WNMC, 2
3:00	Break (Pier 5 foyer)			
3:30	Session 8A: Scheduling	Session 8B: Mobile computing	Workshop on PDMS, 2	Workshop on WNMC, 3

Monday, August 21

Sessions 1-4, Workshop on Metacomputing Systems and Applications (MSA)

Sessions 1-4, Workshop on Pervasive Computing (PC)

Sessions 1-4, Workshop on Scalable Web Services (SWS)

Sessions 1-4, Workshop on High Performance Scientific and Engineering Computing with Applications (HPSECA)

Tuesday, August 22

8:00-9:00 - Registration and continental breakfast

9:00-9:30 - Opening and awards

9:30-10:30 - Keynote address: "Next Generation Network Technology and Its Impact on the Society," Professor Shoichi Noguchi, President, University of Aizu, Japan

10:30-11:00 - Break

11:00-12:00 - Sessions 1A/1B/1C/Workshop on HPSECA

Session 1A: Application-specific mechanisms
Session chair: Chung-Ta King
• A Problem Specific Fault Tolerance Mechanism for Asynchronous, Distributed Systems, A. Iamnitchi, I. Foster
• A Parallel Architecture for Quadtree-based Fractal Image Coding, S. Lee, S. Omachi, H. Aso

Session 1B: Interconnection networks
Session chair: Stephan Olariu
• Multi-Node Multicast in Multi-Dimensional Wormhole Tori and Meshes with Load Balance, M. Yang, Y. Tseng, M. Jian, C. Lin
• Multilayer VLSI Layout for Interconnection Networks, C. Yeh, E. Varvarigos, B. Parhami

Session 1C: Message-passing
Session chair: Wu-chun Feng
• TPO++: An object-oriented message-passing library in C++, T. Grundmann, M. Ritt, W. Rosenstiel
• Specification of Performance Problems in MPI Programs with ASL, T. Fahringer, M. Gerndt, G. Riley, J. Traeff

Session 5, Workshop on High Performance Scientific and Engineering Computing with Applications (HPSECA)

12:00-1:30 - Lunch (on your own)

1:30-3:00 - Sessions 2A/2B/2C/Workshop on HPSECA

Session 2A: Reuse and speculation
Session chair: Harvey Wasserman
• Load Redundancy Removal through Instruction Reuse, J. Yang, R. Gupta
• Partial Resolution in Data Value Predictors, T. Sato, I. Arita
• Compiler Techniques for Energy Saving in Instruction Caches of Speculative Parallel Microarchitectures, S. Kim, R. Eigenmann

Session 2B: Shared-memory systems
Session chair: Anand Sivasubramaniam
• Non-Strict Cache Coherence: Exploiting Data-Race Tolerance in Emerging Applications, S. Tambat, S. Vajapeyam
• User-Level Dynamic Page Migration for Multiprogrammed Shared-Memory Multiprocessors, D. Nikolopoulos, T. Papatheodorou, C. Polychronopoulos, J. Labarta, E. Ayguade
• An Effective Selection Policy for Load Balancing in Software DSM, T. Liang, J. Li, C. Shieh

Session 2C: Multimedia servers
Session chair: Wu-chi Feng
• Solving a Media Mapping Problem in a Hierarchical Server Network with Parallel Simulated Annealing, X. Zhou, R. Lueling, L. Xie
• A Network Co-Processor-Based Approach to Scalable Media Streaming in Servers, R. Krishnamurthy, K. Schwan, R. West, M. Rosu
• A Reliable Statistical Admission Control Strategy for Interactive Video-On-Demand Servers with Interval Caching, C. Das, S. Kim

Session 6, Workshop on High Performance Scientific and Engineering Computing with Applications (HPSECA)

3:00-3:30 - Break and refreshments

3:30-5:00 - Sessions 3A/3B/3C/Workshop on HPSECA

Session 3A: Adaptive systems
Session chair: Yves Robert
• Match Virtual Machine: An Adaptive Runtime System to execute MATLAB in Parallel, M. Haldar, A. Nayak, A. Kanhere, P. Joisha, N. Shenoy, A. Choudhary, P. Banerjee
• A Comprehensive Dynamic Processor Allocation Scheme for Multiprogrammed Multiprocessor Systems, I. Kazi, D. Lilja
• ADAPT: Automated De-Coupled Adaptive Program Transformation, M. Voss, R. Eigenmann

Session 3B: Wireless networks, I
Session chair: Chi-Hsiang Yeh
• Depth first search and location based localized routing and QoS routing in wireless networks, I. Stojmenovic, M. Russell
• Energy-Efficient Routing Protocols in Ad-hoc Radio Net-

works, K. Nakano, S. Olariu, A. Zomaya
• Domination and Its Applications in Ad Hoc Wireless Networks with Unidirectional Links, J. Wu

Session 3C: Identifying and predicting parallelism
Session chair: Tarek S. Abdelrahman
• Identifying Parallelism in Programs with Cyclic Graphs, Y. Hwang, J. Saltz
• Partitioning Loops with Variable Dependence Distances, Y. Yu, E. D'Hollander
• A General Predictive Performance Model for Wavefront Algorithms on Clusters of SMPs, A. Hoisie, O. Lubeck, H. Wasserman, F. Petrini, H. Alme

Session 7, Workshop on High Performance Scientific and Engineering Computing with Applications (HPSECA)

5:00-7:00 - Recess

7:00-9:00 - Wine and cheese reception

Wednesday, August 23

8:00-9:00 - Registration and continental breakfast

9:00-10:00 - Keynote address: Dr. Tilak Agerwala, Vice President, IBM Enterprise Systems Group

10:00-10:30 - Break

10:30-12:00 - Sessions 4A/4B/4C/Workshop on NBC

Session 4A: Web servers
Session chair: Alok Choudhary
• Techniques for Achieving High Performance Web Servers, S. Nadimpalli, S. Majumdar
• Modeling Web Caching Schemes for Performance Studies, C. Chiang, M. Ueno, M. Liu, M. Muller
• Utilization-Based Admission Control for Real-Time Applications, D. Xuan, C. Li, R. Bettati, J. Chen, W. Zhao

Session 4B: Wireless networks, II
Session chair: Hiromi Okada
• Energy-Efficient Initialization Protocols for Ad-hoc Networks with no Collision Detection, K. Nakano, S. Olariu
• Multicast Routing Protocol by Multicast Agent in Mobile Networks, H. Shin, Y. Suh
• GPS-Based Message Broadcasting for Inter-vehicle Communication, M. Sun, W. Feng, T. Lai, K. Yamada, H. Okada, K. Fujimura

Session 4C: Heterogeneous computing, I
Session chair: Marcel Rosu
• Matrix-Matrix Multiplication on Heterogeneous Platforms, O. Beaumont, V. Boudet, F. Rastello, Y. Robert
• The Adverse Impact of the TCP Congestion-Control Mechanism in Heterogeneous Computing Systems, W. Feng, I. Philp, P. Tinnakornsrisuphap
• Reliable Matching and Scheduling of Precedence-Constraint Tasks in Heterogeneous Distributed Computing, A. Dogan, F. Ozguner

Session 1, Workshop on Network-Based Computing (NBC)

12:00-1:30 - Lunch (on your own)

1:30-3:00 - Sessions 5A/5B/5C/Workshop on NBC

Session 5A: High-performance I/O
Session chair: Yuanyuan Yang
• A Scalable, Cost-Effective, and Flexible Disk System Using High-Performance Embedded-Processors, A. Tomita, N. Watanabe, Y. Takamoto, S. Inohara, F. Maciel, H. Odawara, M. Sugie
• An Efficient Algorithm for Large-Scale Matrix Transposition, J. Suh, S. Narayanan, V. Prasanna
• Design and Evaluation of Smart Disk Architecture for DSS Commercial Workloads, G. Memik, M. Kandemir, A. Choudhary

Session 5B: Network routing
Session chair: Angelos Bilas
• A Performance Model of Adaptive Routing in k-Ary n-Cubes with Matrix-Transpose Traffic, H. Sarbazi-Azad, M. Ould-Khaoua, L. Mackenzie
• Improving the Performance of Regular Networks with Source Routing, J. Flich, P. Lopez, M. Malumbres, J. Duato
• Simultaneous Multithreading-Based Routers, K. Vibhatavanij, N. Tzeng, A. Kongmunvattana

Session 5C: Heterogeneous computing, II
Session chair: Fusun Ozguner
• Optimizing Static Job Scheduling in a Network of Heterogeneous Computers, X. Tang, S. Chanson
• A Scalable Task Duplication Based Scheduling Algorithm for Heterogeneous Systems, S. Ranaweera, D. Agrawal.
• On the Design of Communication-Aware Task Scheduling Strategies for Heterogeneous Systems, J. Ordua, V. Arnau, A. Ruiz, R. Valero, J. Duato

Session 2, Workshop on Network-Based Computing (NBC)

3:00-3:30 - Break and refreshments

3:30-5:00 - Panel Session: "Scalable computing infrastructure for scientific and commercial applications"

Organizer and moderator: Angelos Bilas, University of Toronto
Panelists: Kourosh Gharachorloo, Compaq Western Research Lab; Oran Krieger, IBM T.J. Watson Research Center; Ronald G. Minnich, Los Alamos National Laboratory; Dhabaleswar K. Panda, Ohio State University; Thomas Sterling, California Institute of Technology; Josep Torrellas, University of Illinois

at Urbana-Champaign.

5:00-7:00 - Recess

7:00-9:00 - Banquet dinner

Thursday, August 24

8:00-9:00 - Registration and continental breakfast

9:00-10:00 - Keynote Address: "The NUMAchine Experience," Zvonko Vranesic, Professor, University of Toronto

10:00-10:30 - Break

10:30-12:00 - Sessions 6A/6B/6C/Workshop on WNMC

Session 6A: Network-based computing
Session chair: Dhabaleswar Panda
- Issues in Designing and Implementing a Scalable Virtual Interface Architecture, S. Nagar, A. Sivasubramaniam, J. Rodriguez, M. Yousif
- Building an Adaptable, Fault Tolerant, and Highly Manageable Web Server on Clusters of Non-dedicated Workstations, C. Yang, M. Luo
- Fine-Grained Parallel VLSI Synthesis for Commercial CAD on a Network of Workstations, V. Kim, P. Banerjee, K. De

Session 6B: Reconfigurable and adaptive networks
Session chair: Liu Pangfen
- A Fault-Tolerant Adaptive and Minimal Routing Scheme in n-D Meshes, J. Wu
- The Double Scheme: Deadlock-free Dynamic Reconfiguration of Cut-Through Networks, R. Pang, T. Pinkston, J. Duato
- Fast Dynamic Reconfiguration in Irregular Networks, O. Lysne, J. Duato

Session 6C: Clustering and partitioning
Session chair: Erik D'Hollander
- On Overlapping Partitions, J. Galtier, S. Lanteri
- Evaluation of Loop Grouping Methods based on Orthogonal Projection Spaces, I. Drositis, G. Goumas, N. Koziris, P. Tsanakas, G. Papakonstantinou
- pMAFIA: A Scalable Parallel Subspace Clustering Algorithm for Massive Data Sets, H. Nagesh, S. Goil, A. Choudhary

Session 1, Workshop on Wireless Networks and Mobile Computing (WNMC)

12:00-1:30 - Lunch (on your own)

1:30-3:00 - Sessions 7A/7B/Workshop on PDMS/ Workshop on WNMC

Session 7A: Large-scale/NUMA systems
Session chair: Nian Tzeng
- The NUMAchine Multiprocessor, R. Grindley, T. Abdelrahman, S. Brown, S. Caranci, D. DeVries, B. Gamsa, A. Grbic, M. Gusat, R. Ho, O. Krieger, G. Lemieux, K. Loveless, N. Manjikian, P. McHardy, S. Srbljic, M. Stumm, Z. Vranesic, Z. Zilic
- The Thread-Based Protocol Engines for CC-NUMA Multiprocessors, H. Hsiao, C. King
- A Balanced Approach to High-Level Verification: Performance Trade-offs in Verifying Large-Scale Multiprocessors, D. Abts, M. Roberts, D. Lilja

Session 7B: Optical networks
Session chair: Timothy Pinkston
- Efficient protocols for permutation routing on all-optical multistage interconnection networks, Q. Gu, S. Peng
- Nonblocking WDM Multicast Switching Network, Y. Yang, J. Wang, C. Qiao
- Probabilistic Analysis of Cyclic Packet Transmission Scheduling in WDM Optical Networks, Keqin Li

Session 1, Workshop on Parallel and Distributed Multimedia Systems (PDMS)

Session 2, Workshop on Wireless Networks and Mobile Computing (WNMC)

3:00-3:30 - Break and refreshments

3:30-5:00 - Sessions 8A/8B/Workshop on PDMS/ Workshop on WNMC

Session 8A: Scheduling
Session chair: Rudolph Eigenmann
- Runtime Parallel Incremental Scheduling of DAGs, M. Wu, W. Shu, Y. Chen
- Lower bounds on precedence-constrained scheduling for parallel processors, I. Baev, W. Meleis, A. Eichenberger
- The effectiveness of loop unrolling for modulo scheduling in clustered VLIW architectures, J. Sanchez, A. Gonzalez

Session 8B: Mobile computing
Session chair: Jie Wu
- A Novel Channel-Adaptive Uplink Access Control Protocol for Nomadic Computing, Y. Kwok, V. Lau
- Incremental Mining for User Moving Patterns to Improve Data Allocation in a Mobile Computing System, W. Peng, M. Chen
- Call Admission Control vs Bandwidth Reservation: Supporting QoS and Bandwidth Efficiency in Multimedia Mobile Networks, J. Jiang, T. Lai

Session 2, Workshop on Parallel and Distributed Multimedia Systems (PDMS)

Session 3, Workshop on Wireless Networks and Mobile Computing (WNMC)

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Kjeldsberg, P.G.; Catthoor, F.; Aas, E.J.;
Computer Aided Design, 2000. ICCAD-2000. IEEE/ACM International Conferen on , 5-9 Nov. 2000
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[Abstract] [PDF Full-Text (704KB)] **IEEE CNF**

77 **Flexible hardware acceleration for multimedia oriented microproce**
Vermeulen, F.; Nachtergaele, L.; Catthoor, F.; Verkest, D.; De Man, H.;
Microarchitecture, 2000. MICRO-33. Proceedings. 33rd Annual IEEE/ACM International Symposium on , 10-13 Dec. 2000
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Maessen, F.; Van der Perre, L.; Willems, F.; Gyselinckx, B.; Catthoor, F.; Eng M.;
Communications and Vehicular Technology, 2000. SCVT-200. Symposium on Oct. 2000
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[Abstract] [PDF Full-Text (580KB)] **IEEE CNF**

79 **Systematic cycle budget versus system power trade-off: a new perspective on system exploration of real-time data-dominated applications**
Brockmeyer, E.; Vandecappelle, A.; Catthoor, F.;
Low Power Electronics and Design, 2000. ISLPED '00. Proceedings of the 2000 International Symposium on , 26-27 July 2000
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[Abstract] [PDF Full-Text (660KB)] **IEEE CNF**

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System Synthesis, 2000. Proceedings. The 13th International Symposium on
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[Abstract] [PDF Full-Text (668KB)] IEEE CNF

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81 **Systematic data reuse exploration methodology for irregular acces patterns**
Van Achteren, T.; Lauwereins, R.; Catthoor, F.;
System Synthesis, 2000. Proceedings. The 13th International Symposium on
22 Sept. 2000
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[Abstract] [PDF Full-Text (608KB)] IEEE CNF

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82 **Task concurrency management experiment for power-efficient spe up of embedded MPEG4 IM1 player**
Prayati, A.; Chun Wong; Marchal, P.; Cossement, N.; Catthoor, F.; Lauwerein Verkest, D.; De Man, H.; Birbas, A.;
Parallel Processing, 2000. Proceedings. 2000 International Workshops on , 21-24
Aug. 2000
Pages:453 - 460

[Abstract] [PDF Full-Text (608KB)] IEEE CNF

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83 **Interactive co-design of high throughput embedded multimedia**
Omnes, T.J.-F.; Franzetti, T.; Catthoor, F.;
Design Automation Conference, 2000. Proceedings 2000. 37th , June 5-9, 200
Pages:328 - 331

[Abstract] [PDF Full-Text (344KB)] IEEE CNF

---

84 **System-level data format exploration for dynamically allocated dat structures**
Ellervee, P.; Miranda, M.; Catthoor, F.; Hemani, A.;
Design Automation Conference, 2000. Proceedings 2000. 37th , June 5-9, 200
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[Abstract] [PDF Full-Text (420KB)] IEEE CNF

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85 **Storage requirement estimation for data intensive applications wit partially fixed execution ordering**
Kjeldsberg, P.G.; Catthoor, F.; Aas, E.J.;
Hardware/Software Codesign, 2000. CODES 2000. Proceedings of the Eighth International Workshop on , 3-5 May 2000
Pages:56 - 60

[Abstract] [PDF Full-Text (996KB)] IEEE CNF

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86 **Formalized three-layer system-level reuse model and methodology**

embedded data-dominated applications
Vermeulen, F.; Catthoor, F.; Verkest, D.; De Man, H.;
Design, Automation and Test in Europe Conference and Exhibition 2000. Proceedings , 27-30 March 2000
Pages:92 - 98

[Abstract] [PDF Full-Text (76KB)] **IEEE CNF**

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87 **Analysis of high-level address code transformations for programma processors**
Gupta, S.; Miranda, M.; Catthoor, F.; Gupta, R.;
Design, Automation and Test in Europe Conference and Exhibition 2000. Proceedings , 27-30 March 2000
Pages:9 - 13

[Abstract] [PDF Full-Text (56KB)] **IEEE CNF**

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88 **Transformations of a 3D image reconstruction algorithm for data transfer and storage optimisation**
Van Achteren, T.; Ade, M.; Lauwereins, R.; Proesmans, M.; Van Gool, L.; Borm J.; Catthoor, F.;
Rapid System Prototyping, 1999. IEEE International Workshop on , 16-18 Jun 1999
Pages:81 - 86

[Abstract] [PDF Full-Text (548KB)] **IEEE CNF**

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89 **Global multimedia system design exploration using accurate memo organization feedback**
Vandecappelle, A.; Miranda, M.; Brockmeyer, E.; Catthoor, F.; Verkest, D.;
Design Automation Conference, 1999. Proceedings. 36th , 21-25 June 1999
Pages:327 - 332

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90 **Parametrizable behavioral IP module for a data-localized low-powe FFT**
Brockmeyer, E.; Ghez, C.; D'Eer, J.; Catthoor, F.; De Man, H.;
Signal Processing Systems, 1999. SiPS 99. 1999 IEEE Workshop on , 20-22 O 1999
Pages:635 - 644

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